

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3008-B 16th Avenue West
Seattle, WA 98119
FAX: (206) 283-5044

October 20, 1992


Gerry Thompson, Project Leader
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results of the analyses of the samples submitted on September 28, 1992 from Project 7238, City Water Quality, PO #M26136.

We appreciate this opportunity to be of service to you on this project. If you have any questions regarding this material, or if you just want to discuss any aspect of your projects, please do not hesitate to contact me.

Sincerely,



Mark Z Perin
Chemist

MZP/dp

Enclosures

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: October 20, 1992
Date Submitted: September 28, 1992
Project: 7238, City Water Quality, PO #M26136

**RESULTS OF ANALYSES OF THE WATER SAMPLE
FOR ANIONS BY ION CHROMATOGRAPHY
Results Reported as mg/L (ppm)**

<u>Sample #</u>	<u>M26136</u>
<u>Analyte:</u>	
Fluoride	1
Chloride	12
Nitrite	<1
Nitrate	<1
Phosphate	<1
Sulfate	5

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**RESULTS OF ANALYSES OF THE WATER SAMPLE
FOR ANIONS BY ION CHROMATOGRAPHY
Results Reported as mg/L (ppm)**

<u>Sample #</u>	<u>Method</u> <u>Blank</u>	<u>M26136</u> <u>Duplicate</u>
<u>Analyte:</u>		
Fluoride	<0.5	1
Chloride	<1	11
Nitrite	<1	<1
Nitrate	<1	<1
Phosphate	<1	<1
Sulfate	<1	5

SAMPLE CHAIN OF CUSTODY

Company Alaskan Copper Works Contact Gerale Thompson
Address 628 Hanson
City, State, Zip Seattle wa 98134
Phone # 623-5800 X 218 Date 9/28

PURCHASE ORDER #

7238

City Water Quality

m 26136

PROJECT LOCATION

SAMPLE DISPOSAL INFORM.

☐ Dispose after 30 days
☒ Return Samples
☐ Call for Instructions

Analyses Requested

m 26136

✓25 11:00

grab
H2O

1

33694

SO₂, NO₂, NO, F, Cl, Fe

Time

Relinquished by:

Gen. H. A. Thompson

Alston Copper

7/28

1:58 PM

Received by:

Mark 2 Penin

600

4281

208

Relinquished by:

Received by:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Project: 7238, City Water Quality, PO #M26136

**RESULTS OF ANALYSES OF THE WATER SAMPLE
FOR ANIONS BY ION CHROMATOGRAPHY
Results Reported as mg/L (ppm)
Quality Assurance**

<u>Sample #</u>	M26136 <u>Matrix Spike</u> % Recovery	M26136 <u>Matrix Spike Duplicate</u> % Recovery	<u>Spike</u> <u>Level</u> (ppm)
<u>Analyte:</u>			
Fluoride	120%	104%	5
Chloride	ai	ai	5
Nitrite	124%	108%	5
Nitrate	a	a	5
Phosphate	a	a	5
Sulfate	134%	106%	5

a - Nitrate and phosphate coeluted.

ai - The amount spiked was insufficient to give meaningful recovery data.

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INVOICE #92ACU1020-1

October 20, 1992

Accounts Payable
Alaskan Copper
P.O. Box 3546
Seattle, WA 98124

Re: Billing for the analyses of the environmental samples
submitted on September 28, 1992 from Project 7238, City
Water Quality, PO #M26136 and reported to Gerry
Thompson, Project Leader.

1 water sample analyzed for Anions by Ion Chromatography @ \$75 per sample	\$ 75.00
No Charge	<u>(75.00)</u>
Amount Due	\$ 0.00

OK TO PROCESS
AHM

FRIEDMAN & BRUYA, INC.

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DUPLICATE COPY

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Water Quality, PO #M26136 and reported to Gerry
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1 water sample analyzed for Anions by Ion Chromatography @ \$75 per sample	\$ 75.00
No Charge	<u>(75.00)</u>
Amount Due	\$ 0.00